

## § 57.04-1

## 46 CFR Ch. I (10-1-97 Edition)

TABLE 57.03-1(b).—LOW TEMPERATURE WELD  
PROCEDURE QUALIFICATION THICKNESS RANGES

Thickness, "t" of test plate or pipe as welded (inches)	Range of thickness of materials qualified by test plate or pipe (inches)	
	Minimum	Maximum
1/16 to 3/8, inclusive .....	1/16	3/8
Over 3/8 but less than 3/4 .....	*3/8	3/4
3/4 to 3, inclusive .....	3/4	**t

\*For thicknesses less than 5/8 inch, the thickness of the test plate or pipe is the minimum thickness qualified.

\*\*Where "t" is the thickest material over 3/4 inch to be used in production.

(5) The limits for heat input production, as measured in Joules/inch, must be at or below the maximum heat input applied to the procedure test plate. The word "maximum" must not be interpreted as either nominal or average.

(c) [Reserved]

(d) For quenched and tempered steels, the Commandant may prescribe special testing to assure that the welding procedure produces weldments which are not prone to low energy fracture through the heat affected zone.

(e) Welding procedures that utilize type E 6012, E 6013, E 6014, E 6024, E 7014, or E 7024 electrode will be approved only for the specific type, size, and brand electrode used. If a different type, size, or brand of electrode is used, a new procedure qualification test must be conducted.

(f) Welding or brazing procedure approvals cannot be transferred from one plant to another plant of the same company or from one company to another.

(g) (Modifies QW 253, QW 254, and QW 255). Item QW 402.4 is an essential variable for all procedure specifications.

[CGD 74-102, 40 FR 27461, June 30, 1975]

### Subpart 57.04—Procedure Qualification Range

#### § 57.04-1 Test specimen requirements and definition of ranges (modifies QW 202, QW 210, QW 451, and QB 202).

The type and number of specimens that must be tested to qualify an auto-

matic, semiautomatic, or manual procedure specification shall be in accordance with QW 202, QW 210, or QB 202 of the ASME Code as applicable, except as supplemented by §§ 57.03-1(b) and 57.03-1(d).

[CGD 74-102, 40 FR 27461, June 30, 1975]

### Subpart 57.05—Performance Qualifications

#### § 57.05-1 General.

(a) This subpart supplements the various paragraphs in section IX of the Code dealing with Performance Qualifications (see § 57.02-2).

[CGFR 69-127, 35 FR 9980, June 17, 1970]

#### § 57.05-2 Transfer of performance qualifications.

(a) The performance qualification records of a welder may be transferred from one plant to another of the same company or from one company to another company provided the following requirements are met:

(1) The transfer is authorized by the cognizant Officer in Charge, Marine Inspection;

(2) A copy of the qualification test records of each welder together with employment records and identification data are transferred by the plant or company which qualified the welder to the new plant or company; and,

(3) The new plant or company accepts the welder as qualified.

#### § 57.05-3 Limited space qualifications.

When a welder is to be qualified for welding or torch brazing of piping on board ship in a limited or restricted space, the space restrictions shown in connection with Figure 57.05-3(a) or (b) shall be used when welding and brazing the test joint.

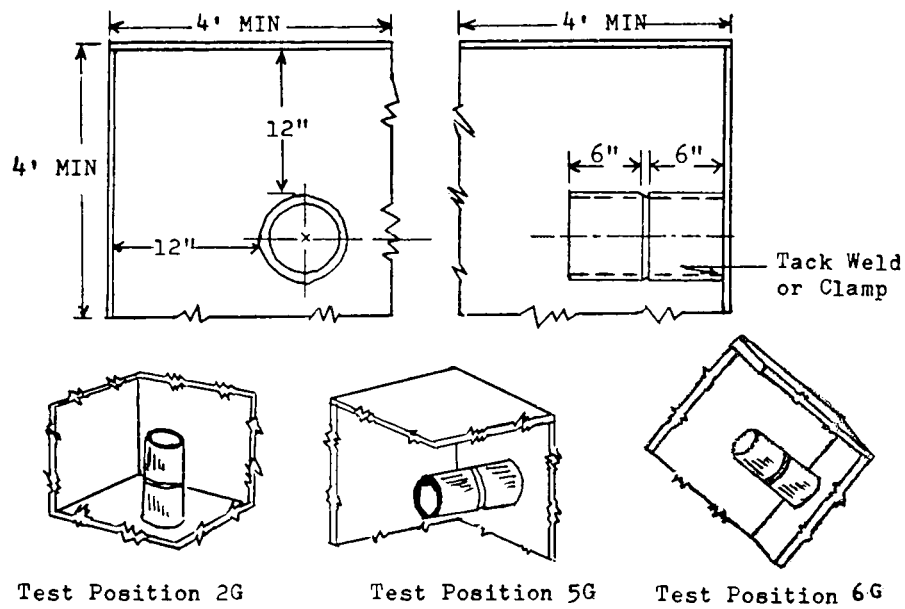


FIGURE 57.05-3(a)—Limited space restriction for pipe welding performance qualification.

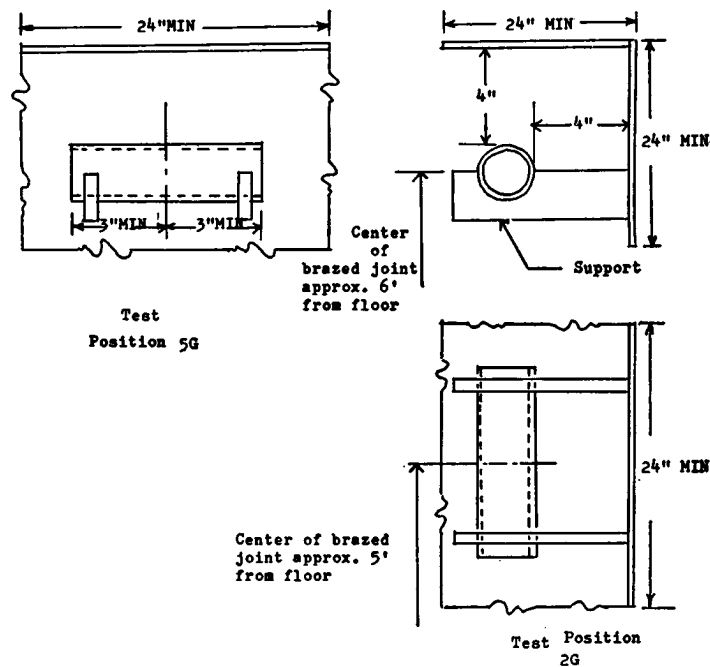


FIGURE 57.05-3(b)—Limited space restriction for pipe brazing performance qualification.  
[CGFR 68-82, 33 FR 118872, Dec. 18, 1968, as amended by CGD 74-102, 40 FR 27461, June 30, 1975]

#### § 57.05-4 Welder qualification by procedure tests.

Qualification tests of welders may be omitted for welders who weld satisfactory procedure qualification test assemblies as required by subpart 57.03.

#### § 57.05-5 Low temperature application.

For low temperature application, each welder shall demonstrate his ability to weld satisfactorily in accordance with procedures qualified in accordance with § 57.03-1(b). Manual welding shall be qualified in the position prescribed by the procedure.

### Subpart 57.06—Production Tests

#### § 57.06-1 Production test plate requirements.

(a) Production test plates shall be provided for Class I, Class I-L, Class II, and Class II-L pressure vessels are specified in this section.

(b) Main power boilers shall meet the test plate requirements for Class I pressure vessels.

(c) Test plates are not required for heating boilers or Class III pressure vessels. Test plates are not required for main power boilers or pressure vessels constructed of P-1 material as listed in QW 422 of the ASME Code whose welded joints are fully radiographed as required by Part 52 or 54 of this subchapter as applicable except when toughness tests are required in accordance with § 57.06-5. When toughness tests are required all prescribed production tests shall be performed.

[CGFR 68-82, 33 FR 18872, Dec. 18, 1968, as amended by CGFR 69-127, 35 FR 9980, June 17, 1970; CGD 72-206R, 38 FR 17229, June 29, 1973; CGD 74-102, 40 FR 27461, June 30, 1975; CGD 95-012, 60 FR 48050, Sept. 18, 1995]